



# Meeting Minutes

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**Prepared for:** Midas Gold Idaho, Inc. (Midas Gold)

**PROject Title:** Stibnite Gold PROject

**Date:** August 8, 2019

**Meeting Title:** Enter meeting name here

**Time:** 9:00 a.m. MST

**Web Conference Link:** [ HYPERLINK [Ex. 6 Personal Privacy (PP)] ]

**Call-In Phone No.:** [Ex. 6 Personal Privacy (PP)] (Participant Code: [Ex. 6 Personal Privacy (PP)])

**Represented Organizations<sup>1</sup>:** USFS, USFWS, NOAA, OER, IDFG, Shoshone and Nez Perce Tribes, Midas Gold, AECOM, Ecosystem Sciences, Brown and Caldwell, BioAnalysts

### Attendees:

Clayton Nalder, USFS	Dan Kline, Midas Gold
Piper Goessel, USFS	Gene Bosley, Midas Gold
Jennifer Frownfelter, AECOM	Paul Leonard, BC
Derek Risso, Ecosystem Sciences	Aylin Lewallen, BC
Ally Turner, USFWS	Kurt Zeiler, BC
Marve Griffith, USACE	Mark Porter BC
Johnna Sandow, NOAA	Alix Matos, BC
Bill Lind, NOAA	Linique Kimball, BC
Marde Mensinger, OER	Mark Miller, BioAnalysts
Michael Edmondson, OSC	Amy Prestia, SRK
Lance Hebdon, IDFG	Jeff Fealko, Rio ASE
Jordan Messner, IDFG	
Bill Bozworth, IDFG	
Robyn Armstrong, NPT	
Emmit Taylor, NPT	

### Discussion:

#### Review ESA SharePoint Site Organization – Objective 5

**Lewallen:** SharePoint is intended to be a sharing platform. You will receive a link when new information is shared. User name is [Ex. 6 Personal Privacy (PP)] your initial temporary password is: [Ex. 6 Personal Privacy (PP)] Use Microsoft Internet Explorer. The home screen has a calendar, documents and a quick link to change your password. Please change your password once you log in. If you have a reference to share, please send it to Aylin, Brandy or Kristan.

**Kline:** Has anyone had issues logging in?

**Lind:** I need approval.

**Lewallen:** We are also putting in field and sampling events. July 19-20 there is a fish sampling event. Click on documents and you will see four folders: BA, Fish, References and Terrestrial.

**Kline:** Has anyone been able to view content folders?

**Lind:** I am having issues.

**Edmonson:** I am having issues, as well.

**Lewallen:** Dan or Paul, please let me know who is having issues or needs to be added from the meeting today and I will get addressed.

**Lewallen:** Showed the contact list for SharePoint and who is participating in the ESA IC meetings.

**Kline:** The list will be sent out today to the group for review.

#### Status of IP Analysis Review and Discussion

**Risso:** Revisions to IP have been slow. 30-meter (m) segments utilizing add service information tool. During their review of the IP results Rio ASE found errors and a consistent bias in the calculation of slope as compared to other methods (Occupancy Modeling) and field measurements. These were reported to the USFS and Ecosystem Sciences and they began the Process of checking and correcting them in coordination with Rio ACE. Derek explained that Ecosystem Sciences has revised the slope calculations. Absolute slope means if changes to PRO LIDAR. Add service information tool = slope absolute. LIDAR indicates certain hours have negative slopes. Decided to use ride/run method which resulted in 131 segments (3,784 total segments) with negative slopes.

**Risso:** Ups to LIDAR = positive slopes. Using 1m average then average them together. Rise/run bulges in LIDAR. Small increases – ½ meter. Study area wide revised results min-avg. + max.

LIDAR.

**Bosley:** Did you generate based on LIDAR?

**Risso:** Yes. We use the ARC hydro tool. Any change in elevation, LIDAR is likely to go down, not up.

**Bosley:** Half meter rocks don't surprise me given the depths of pools and the size of habitats.

**Risso:** Yes, I agree. Rise/run more accurate. We just have to agree it doesn't go uphill.

**Kline:** Rise over run similar to accuracy model?

**Risso:** Yes. Some variability with reach. 30M segments are at the edge of what data recognized at.

**Bosley:** How did this perform? Width is 10 meters.

**Risso:** East Fork 4.3 in that area. Look at 3.2 down. Fiddle comes in between 2.3-2.4. Revise is 6.9.

**Bosley:** Revised makes more sense in reaches except 2.5.

**Risso:** Yes, that is where it goes negative. 2.5 set to 0.5 became flatter regions.

**Edmonson:** Appears accurate. If you want a paper, I can pass it around. **ACTION ITEM –**

#### shared in meeting

**Risso:** Data and executive summary reflects revised numbers. The fully revised report will come later; we will send.

**Miller:** Likely to change end points of the analysis, which are based in part of gradient.

**Risso:** Extent of IP not changed. Changing quality, you are referring to IP.

**Miller:** Barrier?

**Risso:** Nothing old and new. The spreadsheet is looking at differences.

**Kline:** **ACTION ITEM –** send out the spreadsheet for review again

**Risso:** Yes, baseline executive summary only Providing results and issues addressed.

**Bosley:** We need to do a little more checking on 0 and 0.5%'s. Some are good with correction and some are suspicious. 3.3 and 3.1 East Fork jumping out.

**Risso:** Need GIS in front of me. We can set up a call. **ACTION ITEM – set up a separate call to**

#### discuss the slope %'s less than 0.5%

**Kline:** When will executive summary be sent out?

**Risso:** Hoping draft to AECOM by Monday. **ACTION ITEM – send out the revised ES**

**Fealko:** IP missing is steelhead.

**Risso:** Yes. I will request with Tim. Table of gradient vs. what fed into original report and will be fed into new report.

**Kline:** What is our method of sending out?

**Nalder:** Just email?

**Risso:** The results of the IP modeling showed highly variable IP scores in areas that were fairly similar. Rio ASE and Ecosystem Sciences had discussed this and they fact that this was caused by the method used to calculate valley bottom width, which was the cause. . For example, the streamline; we are in the right place. Across the valley more variability.

**Risso:** Valley Bottom width solution for restored section of Meadow Creek. Set line down the center valley center; easy fix.

**Bosley:** I like that approach; best estimate.

**Kline:** Will Valley Bottom width be corrected? Will it play a part in baseline in the executive summary?

**Risso:** Yes; reflected in methods of executive summary.

**Miller:** How did they use Valley Bottom width?

**Lewallen:** They used standard 2 to 3 widths; simple.

**Miller:** That sounds right.

#### Modeling Results Presentation – MOD-PRO and Changes from PRO (2 hr.) – Objectives 2-4

**Leonard:** What are differences between PRO vs. Mod-PRO? Mostly to improve environmental performance, reduce footprint and responses to RFA's and agency comments. ESA informal consultation. We should send out the report that fully describes the Mod-PRO. Listed two references in the PowerPoint for reference.

**Kline:** We can upload both documents cited on the slide to the ESA SharePoint site. **ACTION ITEM**

**Nalder:** Doc A targeted to go into chapter 2. Everyone would have access to this.

**Leonard:** Yes, Doc BC 2019a and BC 2019b.

**Leonard:** Mod-PRO: Modifications to development rock storage and to service water management. Diverting Hennessy Creek, now being re-routed to improve water quality. Hangar Flats Pit extend Meadow Creek liner, Direct peak Meadow Creek, extend flow to RIB's and tailings consolidation water management.

**Leonard:** What was the key driver for extending the TSF water management duration Gene?

**Bosley:** Water consolidation – managed water longer than we thought.

**Leonard:** Discussed PROPRO operations and post closure. Points better from an engineering perspective. Allows handling of high flows better and improves water quality in the pit.

**Miller:** Is Hennessy coming back upstream?

**Bosley:** Hennessy is side hill up the Fiddle. Side benefit to help hill slope ground water.

**Leonard:** PROMOD-PRO Alternative, combined open channel then down, flow in the middle of the pipe. Reduced stream temperatures.

**Leonard:** Diversion structure above 5 CFS.

**Nalder:** Once Hangar Flat Pit is filled?

**Leonard:** The point is to not have it connected. Will join Meadow Creek downstream.

**Bosley:** Yes, correct.

**Nalder:** Isolation of species?

**Leonard:** In report of elements of PRO Capping when done. With changes how does hydrology change? SRK (Amy) experts at water chemistry modeling.

**Leonard:** Modeling and Scenarios: existing conditions, Proposed action/no action, PROMOD-PRO Alternative, and East Fork.

**Zeiler:** Hydrologic modeling – expected flows out of pit to Meadow Creek. Average 1-2 cfs and range from 0.6 cfs to 1.2 cfs. depending upon season.

**Sandow:** Seasonally connected?

**Leonard:** Yes.

**Bosley:** To clarify early? Will not be high flow – outflow Eastlake could swim low outlet.

**Leonard:** Fish could come up into HF pit is allowed by the design.

**Leonard:** During July 17<sup>th</sup> presentation Water temperature in Yellow Pine Pit, there was a question about adding back a Yellow Pine pit lake-like feature that would moderate temperatures, reducing maximum temperatures. It moderates temperature streams (temperature monitoring).

**Nalder:** Kline are you entertaining that?

**Leonard:** Yes, we are starting to look at the benefits of adding a Yellow Pine pit lake-like feature.

**Zeiler:** Proposed action hydrologic model predicted reductions in Meadow Creek streamflows downstream of Hangar Flats pit/pit lake. Predicted reduction in 13310800 gage location streamflows from reduction groundwater discharge due to EFSFSR TSF liner for EFSFSR TSF alternative. SFA Reach MC6 slide shows Mod-PRO mitigates but doesn't eliminate predicted streamflow reductions downstream of Hangar Flats pit. Meadow Creek liner extension and RIBs leads to Mod-PRO scenario predicting greatest streamflow for 13311000 gage location. Mitigation of streamflow reductions continues downstream on EFSFSR at 13312500 gage location. Only minor streamflow reductions in Sugar Creek at 13311450 gage location predicted by for original Proposed Action scenario, and even less streamflow reductions predicted for MOD-PROPRO. MOD-PROPRO components of note during operations period are extension of Meadow Creek lined channel and partial backfill of Hangar Flats pit. Modified PRO predicts mitigation of reductions in Meadow Creek streamflow compared with previous streamflow predicted impacts. Mod-PROPRORO mitigation of streamflow reductions continues downstream on EFSFSR. Mod-PRO streamflow results for post-closure period are similar to operations period. Predicted streamflows at 13310800 gage location are similar for all scenarios. Mod-PRO predictions of streamflow in SFA Reach MC6 are much improved over original Proposed Action scenario. Mod-PRO improved streamflow predictions continue downstream on EFSFSR as shown at gaging locations 13311000 and 13311250. The Hangar Flats pit lake filling prediction is accelerated in the Mod-PROPRO to slightly more than two years primarily through partial backfill and diversion of run-off flows.

**Zeiler:** Summary post closure – the Mod-PRO mitigates, but does not eliminate, the previously predicted streamflow reductions. The primary Mod-PRO components that lead to the improvements in predicted streamflows include extended channel lining on Meadow Creek, diversion of runoff flows to Hangar Flats pit lake during filling, extending the period of flow to RIBs to augment low streamflows during Hangar Flats pit lake filling, and partial backfilling of the Hangar Flats pit.

**Sandow:** Extend period of RIB, so dewatering while trying to fill?

**Zeiler:** Two shallow bedrock dewatering wells above Yellow Pine pit supply to RIBs through pumping of wells; during period of low flows no predicted impact to streamflow from shallow bedrock well pumping.

**Nalder:** Not much of an impact 1.5 cfs?

**Zeiler:** That was a monthly maximum.

**Kline:** Any questions on details?

**Nalder:** Summary to inform Fish and Wildlife? Helpful to do that for Meadow Creek. Advantage to get to regulatory agencies.

**Leonard:** I thought we would do that anyways

**Nalder:** I have peak shaving 5 cfs – below?

**Leonard:** Yes, where that diversion going to occur.

**Nalder:** 5 cfs above or below in Meadow Creek?

**Leonard:** Above cfs.

**Nalder:** PRO and Mod-PRO Important.

**Sandow:** What percentage rate are we evaluating?

**Leonard:** 5 cfs bypass – 2 to 2 1/2 years to fill pit lake.

**Bosley:** We already have this in spreadsheet.

**Nalder:** To have any would be helpful. **ACTION ITEM** – BC put together a comparison table of PRO and Mod-PRO summer/fall low and high flows. **ACTION ITEM** - MGII to define peaking shaving point of MC to hangar flat pit (where?) and flow gage points

**Fealko:** 2 flow scenarios; can see variations.

**Leonard:** Steam & Pit Lake network temperature (SPLNT). Alix Matos see PowerPoint.

**Matos:** Today we will summarize the Mod-PRO Alternative relative to NA, PA and EFSFSR TSF. Three representative seasonal conditions are simulated w/ SPLNT. Two of these were developed to compare results to USFS & IDEQ thermal criteria. One was developed to support occupancy models.

**Matos:** Minimal impact (maybe 1/10 of a degree, but very small impact). The GLM model used simulates the surface temperature of the pit lake, and the partial backfill does not affect that. Based on the mass balance approach requested by the USFS as part of the SPLNT Proposed Action Report, the likely spatial extent of increased maximum temperatures for all three Project alternatives discussed (PA, EFSFSR TSF, and Mod-PROPRO) for the summer condition is predicted to be 9.5 kilometers.

Matos Provided summary of max summer temperatures.

**Nalder:** Look at temperatures. We are close to thresholds. Fish may not migrate up Meadow Creek. Too warm for spawning salmon. Any other options to reduce stream temperatures?

**Matos:** Running high level analysis now of adding a feature like the YPP on top of the backfilled YPP.

**Nalder:** That feature would not affect temperatures in lower Meadow Creek, which are also relatively high. We have also discussed potentially straightening the restored channels.

**Matos:** For this area, one option is to build cool water refuge pools near Meadow Creek/EFSFSR confluence for a holding space.

**Fealko:** The pools are one option, but not one that can be simulated with the SPLNT model. Also, SPLNT models are on conservative side. Another option is to split flows in multiple channels to increase shade coverage associated with riparian plantings. Ofcourse splitting flows would result in lower flow rates, which also affects temperature, so would need to consider that as well.

**Matos:** We did test straightening the restored channels to have a hypothetical sinuosity ratio of 1:1. We did see some decreases in temperature (~1 degree C) specific reaches, but the temperatures tend to revert back to the previously simulated temperatures once you get out of the restored reaches where the sinuosity ratio was altered. Also, this test was for a hypothetical sinuosity ratio of 1, and in reality, the design would fall somewhere between the PRO and this hypothetical condition. PRO

**Kline:** Again, these are max temperatures.

**Sandow:** Yes, max temperatures are important.

**Nalder:** See Table B46. You also have Provided summer average and fall max and average temperatures to see what those are.

**Nalder to Sandow:** Fall max is 16 degrees in Meadow Creek. **Ally,** PRO for reach is 7.8. **Kline** be aware. We now have temperature issues in East Fork. Even Sugar Creek could have temperature issues during migratory season.

**Matos:** With respect to the vegetation growth analysis, for all other reaches (those that are not “restored”) vegetation growth and resulted shade is maintained at the No Action level even for the model run that represents 112 years post closure.

**Hebdon:** How fine is model ability to track through time? What is time scale? Daily? Weekly?

**Matos:** For the QUAL2K component of the SPLNT model, the model runs over a 24-hour period, and the time step is hourly. For the maximum weekly summer condition, the representative period is late July to early August 2016. For the maximum weekly fall condition, the representative week was the 1<sup>st</sup> Fall week of September 24, 2014. These two periods were selected from the flow and temperature monitoring data available on site over a four-year period. These two periods had the lowest, steadiest stream flows and the

warmest observed stream temperatures with the best coverage in terms of number of stations with data.

**Sandow:** Take home message. When spawning initiated, temperatures falling (between the maximum weekly summer condition and the maximum weekly fall condition).

**Hebdon and Nalder:** See the Johnston Creek spawning data. See the Chinook Nez Pierce Tribe data. See EPA temperature data.

**Hebdon:** Temperature issues will raise eyebrows. You could plot that with 24-hour time scale.

**Matos:** The time step is hourly, but hourly output from QUAL2K is not used for regulatory purposes per the user manual and conventional practice. The output to evaluate is the maximum, minimum and average temperatures Provided. GLM does run on daily timestamp.

**Nalder:** One thing that could be done. EPA thresholds – EPA temperature guide Region 10 (Action item).

**Leonard:** **ACTION ITEM** – Send out hyperlink to EPA's temperature criteria, NOAA's letter of support for the criteria and Oregon temp BiOp

**Sandow:** Oregon changed to the Region 10 criteria; NOAA consulted but disagreed with the 20 C migration criteria; NOAA is not comfortable with 20 C.

**Miller:** Also, see concurrence letter.

**Sandow:** MOU that to NOAAs letter of support to EPAs region 10 and Oregon temperature decision. **ACTION ITEM** - She will send both documents for forwarding to the group.

**Nalder:** Is Tamarac Creek included?

**Matos:** Yes, included in Section 5.6.

**Nalder:** So, we can see how the temperatures change at each tributary input?

**Matos:** Correct. For the PA, it takes until Profile Creek to get within 1/10 of a degree of the NA temperature at the model terminus.

**Nalder:** Todd Leed's (not attending today) asked what we think the modeling error is on these? For example, slide 58 shows a simulated temperature difference between the PA and Mod-PROPRO of 0.2 C for simulation EOY112. Is that a "real" difference?

**Matos:** I would not have confidence in that exact difference of 0.2 C for EOY112 between these two scenarios; a 0.2 C difference is very small.

**Nalder:** Yes, we can't say much about that difference.

**Kline:** 2/10's not much of a difference.

**Nalder:** During operations there is a 3 C difference in the Meadow Creek area.

**Matos:** That's a "real" difference due to the piping of low flows in the diversion channels.

**Kline:** Follow up on Todd Leed's questions. What's the tolerance range to narrow it down? Difficult to determine.

**Matos:** Also, we feel that the analysis is conservative (note that the agencies disagree with that assessment and feel that the conservative assumptions are needed to counter balance the uncertainty in the models). For example, for enhanced channels which do not have riparian planting plans and for other channels that are not restored, the vegetation is assumed to remain constant through time at No action level maintained. The vegetation analysis that we developed with the agencies does not account for overlapping canopy that would result based on the planting plan and growth rates were assumed in the middle of the range for the local conditions.

**Bosley:** Is it plus or minus the same amount because of uncertainty/conservatism is it plus one number and minus another (e.g., plus 1 minus 5)?

**Matos:** Agree because of the conservatism used in developing the inputs that uncertainty isn't plus or minus the same degree. **Bosley:** Tolerance up or down.

**Kline:** Question asked about tolerance of modeling results. Difficult to come up with. How does this pertain to the BA and draft EIS? Direct implications. Clayton?

**Nalder:** How defensible are tolerances? Even if able to develop is 19 degrees to 18 degrees a significant change? Just let it play out. Alex, how long would it take to develop these tolerances?

**Matos:** We would need to come up with a process, and we would not want to develop the process in a vacuum. We would want to develop the methods for determining this with the agencies.

**Fealko:** Another approach. Look at occupancy model, is a specific temperature difference (e.g., 0.5 C) important?

**Risso:** Yes, bull trout. Cutthroat is different.

**Nalder:** Look at Isaac's data to see what half of a degree does. There is so much uncertainty, not sure that additional evaluation of tolerances would be helpful.

**Leonard:** NEPA says acknowledge it (the uncertainty). For this modeling, the key driver is vegetative shading.

**Matos:** Yes, shading and the pit lakes where they are present. When we developed the vegetation growth analysis with the agencies, we evaluated low, middle, and high ranges of growth in example reaches that we can reference back to.

**Kline:** Our objective was to show why the Mod-PRO was deemed necessary. Let's get back on that track. Questions or comments? Site Wide water chemistry (SWCC) Modeling update. Amy up next.

**Prestia:** Geo chemistry piece of this several models. Focused on arsenic. It tells the story. Other perimeters followed same trend. Mercury is another one. Existing conditions, proposed actions, EFSFSR TSF Alternative and Mod-PRO.

**Prestia:** Used some prediction notes. Mod-PRO SWWC model updates. Slight changes in water balance. Focus on closure period. Key results summary. Hangar Flats and Fiddle DRSF models low. Prim ability geosynthetic cover on DRFS. Fiddle DRSF arsenic decrease at YP-T-11. Similar trend in mercury decrease concentrations. Hangar Flats Pit Lake changes to water quality at YP-T-22 (Meadow Creek). Long term steady state arsenic concentrations for Mod-PRO vs. PA scenario. Similar trend to mercury concentrations. ESFFSR TSF higher PA. See PowerPoint.

**Prestia:** West End Pit Lake backfill in midnight pit area. Changes to water at YP-T-6 (West End Creek). Arsenic and antimony concentrations for Mod-PRO compared to PA scenario. Predicted arsenic at TP-T-6. Midnight Pit area does eliminate Pit Lake (and mercury). Predicted arsenic concentrations in midnight area pit, higher than proposed action. Site wide surface water quality. Net benefits of Mod-PRO. YP-SR-4 and YP-SR-2 arsenic levels lower for Mod-PRO. Mercury similar trend. Summary; overall improvement of water quality predicted for Mod-PRO in comparison to PA and EFSFSR TSF Alternative (improvement downstream).

**Edmonson:** Thanks for showing loads over and can we look at what loads are over time?

**Prestia:** We know flow rates and concentrations predicted. We are working with Midas Gold on this.

**Kline:** How modifications reduced impacts is why we did this.

#### SFA Results for the Mod-PRO – Objective 2-4

**Fealko:** Overview of ledger, need for ledger. SFA ledger updates. Mod-PRO SFA ledger results. Developed to support permitting efforts. Started with watershed condition indicators (17). Added a few others. Three categories: good, fair and low. Each reach evaluated. Phase baseline restored interim SFA. For each 194 reaches, gave each reach a ranking. A weighted average of scores (FU= Functional Units; FI= Functional Index. Fish passage barriers. Pool frequency and pool quality larger datasets. RCA and disturbance history. Human disturbances only. Diversion channels used for operational purposes (.5 elements). Ran stream functional assessment and slightly more stream length with PRO. Summary and comparisons of SFA elements. Went through ledger and analyzed. Not proposing major strategies. Elements temperature showing fairly significant reductions. Fine sediment slightly increases in functional units in Mod-PRO. Might jump from 6 to 3. Water chemistry slight increase over PRO. PRO and baseline conditions not much change between PRO and Mod-PRO. Physical barrier both allowing passage through tunnel. Uplift, no significant difference with PRO

vs. Mod-PRO. No real change. Habitat elements no real differences drop in functional units. Large woody debris (consistent pattern). Change in peaks base flows could be wrong with PRO and Mod-PRO. Degradation of flows YR 14-17. Peaks modified. Need to dive into this more. Disturbance history little change; impacts of DSF. Seven total functional units, side by side comparison, added elements together. Slight increase.

**Fealko:** Functional Index largely the same. I have another spreadsheet on reach by reach specific. Some exist in certain timeframes.

**Nalder:** SFA helpful to understand.

**Fealko:** Change default to 1, set to 5. No proposed adjustments to ledgers.

**Lind:** You mentioned migration as one of the motivations. What is Nexus? Mitigations with ESA?

**Kline:** More for informative purposes.

**Nalder:** Looking at how to use this and how to roll up as indicator. Forest service and ESA limited to preferred Alternative.

**Lind:** Fundamental component of SFA put into compartments 1, 2 and 3 to come up with score?

**Fealko:** Yes. Takes weighted average and comes up with score.

**Leonard:** This is a requirement to have documentary mitigation. It's multi-metric index. Scores tell you cumulatively.

**Kline:** Just to add. The core through 404 is wetland and stream. Need to evaluate function. SFA ledger is tool we are using. Thoughts? Questions?

**Miller:** Does SFA use same criteria for them?

**Fealko:** Not sure.

#### Review Comments on the Effects Analysis Approach Matrix and PBFs to WCI Crosswalk Matrix – Objectives 2 and 5

**Leonard:** Purpose: assessment methods and criteria. Available data modeling, cause stressor. July meeting pushed to August. **Leonard** to **Lind:** Was adding access to sidewalks?

**Lind:** Yes. Commented on earlier version. Resubmitting documentation. My list is as inclusive and I provided that.

**Lind:** Can take off sockeye – ignore that.

**Turner:** Any you like to highlight? PBF, use Payette file and cross checked it and added those in there.

**Leonard:** Since this is analysis for BA. Is this adequately summarized in BA? It's a guide for us.

**Turner:** If Fish & Game and tribe could review and add comments. I know Forest Service already has. (**ACTION ITEM** – send effects matrix to State and tribes seeking input, especially available data).

**Nalder:** How we are using SFA elements for analysis. We are working on watershed analysis. May not be ready by next meeting. I will talk to Derek and Maria.

#### Biological Assessment and Schedule Review - Objective

**Kline:** Summary of BA status schedule. Paul providing.

**Leonard:** See PowerPoint. This slide represents the current AECOM schedule for the BA and BO. Started consultation since August 2017. EIS coming out September 20<sup>th</sup>. Published in 01/20/2020. Forest Service provided Alternative. FEIS drafted and published 09/20/2020. Draft BD's need to be changed to BA. Aylin changing and redistributing. Final ROD 01/11/2021. Busy writing sections for your review. Federal Action 02/11/2020. Complete draft final BA 07/14/2020. Complete draft revise draft and final BA to EIS 08/12/2020. Final BO 11/27/2020 into ROD. This is AECOM's recent schedule.



**Leonard:** This schedule does not reflect Midas Gold's preferred schedule that would have the BO be finalized near the same time as the FEIS.

**ACTION ITEM** – Modify the schedule in two ways. First, add review durations to the existing version, and second, create a BA/BO schedule that reflects completing the BO at the time of of the FEIS

**Future Meeting Items Discussion (15 min.)**

**Kline:** Next meeting October 8<sup>th</sup>, 2019. August 22<sup>nd</sup> EPA Tour Use of water quality criteria

- USFS to show how USFS will use SFA elements for WCI analysis for NEPA
- Fish periodicity
- Fish density estimates for salvage and transport guidelines
- FMP/BMP protective measures for blasting
- RIO stream performance criteria
- FOMP and adaptive management criteria.
- Addition of YPP lake feature – need to do modeling work.

**Kline:** Agenda for September 4<sup>th</sup> field trip? Who needs to be on site?

**Review Past and Current Action Items (15 min.)**

Aylin went over and updated. Update contacts list. PROPRO

Current Action Items to add from meeting –

1. Edmundson to send gradient reference paper to BC for adding to SharePoint site and sharing
2. ESS to send out table of gradient comparisons in Excel format for review
3. ESS/AECOM to send out IP Baseline executive summary revision when available
4. Set up call with smaller group to discuss IP results less than 0.5%
5. BC to upload the PRO and mod-PRO references from the presentation (BC 2019a and BC2019b)
6. BC put together a comparison table of summer/fall low and high flows of PRO and mod-PRO (post operations)
7. MGII to define peak shaving point of Meadow Creek to Hangar Flat pit and flow gage points
8. BC to distribute hyperlink to EPA's temperature criteria, NOAA's letter of support for the criteria, and Oregon Temp BiOp
9. Send Effects Matrix to State and Tribes seeking input, especially available data
10. BA/BO schedule revisions – add durations and modify to show BO included in FEIS

Note: Meeting minutes are intended to capture critical information from meetings and are not verbatim.  
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